

au bien de l'Afrique, et ajoutait que la Revue *Africa* était une des meilleures qu'il connût dans son genre.

Cette sympathie, ces encouragements, ce concours accordés à notre œuvre par celui qui vient de nous quitter pour un monde meilleur, après avoir tenu dans notre monde troublé une si grande place, nous ne pouvions pas ne pas les rappeler. La reconnaissance est le devoir de tous, en tous les temps; mais notre Institut s'y croit d'autant plus obligé envers l'illustre défunt, comme envers tous ceux qui lui viennent en aide, que, avec le temps et l'expérience, lui apparaît plus beau, plus grand et plus pressant le magnifique travail de civilisation africaine auquel il s'est voué, de tout cœur.

*Medical Assistance for the Natives of the Belgian Congo; the Work of the 'Foréami'.*

AMONG the duties incumbent on a colonizing nation medical help for the people placed under its guardianship takes a prominent place. The numerous sanitary institutions established on mission stations as well as in administrative, industrial, and commercial centres show how considerable is the medical and social activity of Belgium in the Congo. It is, however, abundantly evident that their sphere of action is necessarily limited and that it is almost impossible for them to reach the rural population living away from administrative stations and modern means of communication. It was therefore with the intention of undertaking an extensive medical effort that in 1930 the 'Fonds Reine Élisabeth pour l'Assistance Médicale aux Indigènes' (Foréami) was established.<sup>1</sup>

The object pursued by this association is the growth of the race: a growth in quantity in the form of 'human capital', and a growth in quality in the form of 'health capital'. This programme includes not only the fight against general mortality and morbidity among children and adults, but also the protection of the pregnant woman, of birth and childhood. While births are always extremely numerous and welcomed by parents, infant mortality is so high that the result is depopulation or, at least, no increase. In consequence of wrong or careless treatment of mother and child the strength of the race is often unsatisfactory and the insufficient physiological resistance which results keeps the adult person constantly predisposed to attack by any kind of disease. If, therefore, the curative and still more the social and prophylactic medical efforts against the great endemo-epidemics, as well as the principles of preventive hygiene, are to be a constant concern of the medical service, they must also make a systematic study of the causes of decrease of births, of infant mortality, and the effective protection of mother and child.

Such an activity cannot be undertaken simultaneously over the whole colony. The Foréami works in successive geographical districts. A district

<sup>1</sup> For detailed information readers are referred to the annual reports of Foréami, from which these notes were taken.

is divided into sub-districts, each of which includes one or two administrative units. The sub-district is the nucleus of medical help for natives. It is divided into areas comprising a certain number of chieftainships, and in each area a number of centres for medical treatment are at work. A staff of doctors and medical helpers is stationed in each sub-district, varying in numbers according to the density of population and the endemiological index established by a previous survey. Its equipment, apart from the hospitals run by the Government, missions, and economic enterprises, consists of a close network of *dispensaires de chefferies*, which permits of the treatment of patients always within 15 or 20 kilometres of their homes; in hilly or marshy regions secondary centres for injections are established midway between the dispensaries. Temporary hospitals are erected near the dispensaries, so that the sick may have a shelter. Each dispensary serves a group of *chefferies*. Here the natives have to attend for treatment. The aim of this organization is to avoid overlapping in the activity of the medical personnel or rather of 'dead points' in the territory.

In each sub-district or part of a sub-district a prophylactic group, consisting of a doctor and a sanitary agent assisted by native employees, is installed. The personnel of such groups is as a rule immediately dependent on the Foréami, but it may also be formed by doctors and sanitary agents belonging to private organizations. The chief duty of the group is to visit the villages, to count the inhabitants, hut by hut, to ascertain the diseases by which they are individually affected, and to look after them. The first counting must be as accurate as possible, particularly in places where the first visit of the prophylactic group was not able to establish a total figure for the population. In this way an exact knowledge of the sanitary and demographic conditions of the population is obtained, knowledge which will ultimately provide reliable data showing the movement of the population and the sanitary results obtained. When this first census is finished the areas are classified into those considered to be healthy and those in which serious endemic disease is found. In the first, the census is replaced by a careful survey of the region and in particular of those places in which isolated cases of epidemic diseases were discovered. In the latter, individual visits to the population, combined with therapeutic activities, are repeated as frequently as the decisive fight against the existing epidemic diseases requires.

The efforts of the doctors are directed less to curative treatment than to prophylaxis. For this purpose in their visits to the villages they investigate the hygienic conditions of each and specify the measures to be undertaken for improvement. The result of these investigations is sent to the recognized chief of the region and forms the *cahier sanitaire* of the *chefferie*. This has, on demand, to be presented to the visiting administrative or medical agent; the latter are obliged to see that the measures prescribed are being executed. The statistics of sick people, arranged in groups, and the records of dispen-

saries kept by native assistants form a bulletin of information from which the *médecins-chefs* of the sub-districts are able to form a judgement on a given group of population where disease is present. The development of philanthropic and social work carried on in leper villages, dispensaries, maternity homes, pre-natal consultations, and consultations for women in confinement, are equally domains in which the activity of the Foréami finds a field.

The work of the Foréami was at first confined to the populations of the Lower Congo. When, after a period of five years' work, this region was handed over to the medical service of the colony, the results of the campaign merit mention. In all 598,542 persons were dealt with by the survey and were submitted to intensive treatment or prolonged and regular observation. The index of infection for sleeping sickness went down from 0.59 per cent. in 1931 to 0.17 per cent. in 1935. The number of young mothers regularly attending the consultations rose within the same time from 3,196 to 24,763; the number of assisted births rose from 298 to 2,120; the number of orphans received in orphanages from 61 to 130; the segregated lepers from 20 in 1932 to 556 in 1935; the demographic growth rose from 18.8 per mille in 1932 to 20.73 per mille in 1934. During the period of occupation a tenacious epidemic of dysentery in Mayombe gave cause for serious alarm. This focus of disease has been completely exterminated. Almost all other diseases are gradually diminishing in force. The endemic *pianioque*, which was actively combated, continues to exist as a focus only in Mayombe, where the infection has considerably decreased. The lepers have been traced, and the contagious cases have as far as possible been isolated in agricultural settlements. Social diseases were systematically investigated and treated; pulmonary tuberculosis is rare. Syphilis is a danger only to the inhabitants of large centres and to some groupings maintaining close contact with these centres. In all sub-districts an improvement is evident, so that the actual situation justifies the transference of the sanitary service to the administration. The following table sums up the results obtained in each sub-district and area, as far as sleeping sickness and growth of population are concerned:

	<i>Sleeping sickness Index of infection</i>		<i>Demographic growth</i>	
	<i>1931-1932 per cent.</i>	<i>1935-1936 per cent.</i>	<i>1931-1932 per mille</i>	<i>1935-1936 per mille</i>
Mayombe . . .	0.24	0.057	+11.960	+13.90
Bas-Fleuve . . .	0.40	0.58	+4.1	+9.49
Seke-Banza . . .	0.46	0.102	-1.71	+7.20
Cataractes-Nord . . .	0.49	0.097	+23.11	+31.2
Cataractes-Sud . . .	0.83	0.20	+30.81	+26.1
Inkisi-Lukunga . . .	0.08	0.018	+23.6	+27.1
Haute-Sele . . .	1.6	0.17	+15.8	+19.5

In 1933 the activities of the Foréami were transferred to the region of the Kwango river. Apart from the Bas-Kwango and Moyen Wamba, where endemic sleeping sickness is serious, conditions in this district are favourable. There is no important endemic disease, and yet the inhabitants are sickly and of a very feeble constitution. Living on arid land, the native is contented with meagre crops and makes no serious effort to improve his conditions by extending his fields. This laziness suits his apathetic attitude and in complete fatalism he is satisfied to bear the consequences. In order to lead him to more normal life and to hasten his development, it was necessary to impose on him an effort of which he was not voluntarily capable and which aimed at providing him with sufficient food. The wretched hygienic conditions in which the native vegetates cannot be ameliorated unless his morale is improved and his means of subsistence increased. Helminthiasis, so widespread throughout the colony and only in exceptional cases dangerous to adult persons, finds here a propitious field for breeding; it is not exaggerated to regard it as an endemic disease. It must therefore be combated, but it was hopeless to expect any results as long as the population had not acquired sufficient resistance to benefit from treatment. The demographic condition of the region is a true picture of chronic malnutrition: a paradoxical and yet universal phenomenon among underfed populations is the fact that they are extremely prolific, but show an appalling rate of infant mortality. It is therefore to be hoped that the campaign started in 1935, and which is being constantly intensified, will produce happy results. The political reorganization is stabilizing the social groups and is putting an end to laziness and fruitless quarrelling; the agricultural policy pursued with tenacity will increase the physical resistance and provide sufficient means of subsistence, while the development of medical assistance will diminish the mortality rate and contribute to a growth of the population. (*Communicated by PROFESSOR N. DE CLEENE.*)

### *L'Institut National pour l'Étude Agronomique du Congo Belge*

DANS un pays à population limitée, où le travail minier prend une importance de plus en plus grande, le progrès agricole constitue l'élément stable du développement économique, et à ce titre l'activité de l'Institut National pour l'Étude Agronomique du Congo Belge (*Inéac*) acquiert un intérêt primordial. Créé pour promouvoir le développement scientifique de l'agriculture, il administre les stations de recherches dont la gestion lui est confiée par le Ministre des Colonies, organise des missions d'études agronomiques, engage des experts et des spécialistes et entreprend tous travaux quelconques se rapportant à son objet.

Cette multiple activité se manifeste dans le domaine des recherches de science pure et de science appliquée, tandis que les travaux de multiplication, de diffusion et de propagation ressortissent aux agents du Gouvernement.